 1: Make sense of problems and persevere in solving them uses concrete objects or pictures to conceptualize a problem. determines the meaning of the problem determines a course to a solution prior to beginning the solution. evaluates progress and changes course if necessary. asks "Does this make sense?" checks answers to problems using a different method 	 2:Reason abstractly and quantitatively uses reasoning strategies to make sense of problems – deconstructing a problem, representing it symbolically, manipulating the individual symbols uses reasoning strategies to make sense of problems – analyzing the context of the problem and determining "what is this asking?" uses quantitative reasoning strategies – creating a representation of the problem, considering the units used, understanding the quantities involved (not just how to compute them), knowing and using properties of operations. 	3: Construct viable arguments and critique the reasoning of others. • construct arguments using concrete referents such as objects, drawings, diagrams, and actions.
 4: Model with mathematics. can apply mathematics to solve problems arising in everyday life, society, and the workplace identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. 	5: Use appropriate tools strategically • consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and make appropriate decisions about which tools to use to solve problems The consider and the consideration are considered as the consideration are consid	6:Attend to precision. • calculate accurately and efficiently • express numerical answers with a degree of precision appropriate for the problem context • students give carefully formulated explanations to each other
7: Look for and make use of structure • students look closely to discern a pattern or structure	8: Look for and make use of regularity in repeated reasoning. • students notice if calculations are repeated, and look both for general methods and for shortcuts	

ments and other observations:				